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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,483	09/13/2000	Abraham R. Matthews	1384.006US1	2761

21186 7590 06/03/2004

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EXAMINER

BRUCKART, BENJAMIN R

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/663,483

Applicant(s)

MATTHEWS ET AL.

Examiner

Benjamin R Bruckart

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-9, 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **Detailed Action**

#### **Status of Claims:**

Claims 1-2, 4-9, 18-20 are pending in this Office Action.

Claims 3, 10-17 are withdrawn without traverse.

The amendment to the specification with regards to the abstract has been entered and overcomes the objection to the specification.

The objection to the drawings is withdrawn.

Claims 1 and 2 remain rejected under 35 U.S.C. 102(b) as being anticipated by Kapustka, K. et al., "CoSine Communications Moves VPNs 'Into the Cloud' with the Leading Managed IP Service Delivery Platform." (Applicants IDS) (Kapustka).

Claims 4-9 are rejected under 35 U.S.C. 103(a) as being anticipated by Kapustka, K. et al., "CoSine Communications Moves VPNs 'Into the Cloud' with the Leading Managed IP Service Delivery Platform." (Applicants IDS) (Kapustka) in view of U.S. Patent 5,745,778 by Alfieri.

Claims 18-20 are rejected under 35 U.S.C. 103(a) as being anticipated by Kapustka, K. et al., "CoSine Communications Moves VPNs 'Into the Cloud' with the Leading Managed IP Service Delivery Platform." (Applicants IDS) (Kapustka) in view of U.S. Patent 5,745,778 by Alfieri in further view of U.S. Patent No. 6,338,092 by Chao et al.

### **Response to Arguments**

Applicant's arguments filed in the amendment filed February 26, 2004, Paper No. 7, have been fully considered but they are not persuasive. The reasons are set forth below.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1, 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "installing an operating system on each processor element" in claim 1, third line. This is vague and indefinite because it conflicts with the specification teaching on page 5, around line 25, where it teaches "an operating system" that manages work to processors. The examiner can find no language in the specification that teaches operating systems installed on the processor elements.

Claim 18 recites the limitation "wherein tracking management and configuration data with an object manager global database includes..." in claim 18, lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 recites the limitation "wherein storing a replica of the object manager global database on a standby control blade includes ..." in claim 19, lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "wherein maintaining consistency between the global and standby databases includes updating a standby databases includes ..." in claim 20, lines 1 and 2. There is insufficient antecedent basis for this limitation in the claim.

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**Applicant's invention as claimed:**

**Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kapustka, K. et al., "CoSine Communications Moves VPNs 'Into the Cloud' with the Leading Managed IP Service Delivery Platform." (Applicants IDS) (Kapustka).**

A method of managing a switch (Page 1, Paragraphs 1, 2, "IPSX 9000 is a service processing a switch").

installing the switch having a plurality of process elements (Kapustka, Page 4, Paragraph 1; multiple RISC-based CPUs);

installing an operating system on each processor element (Kapustka, Page 4, Paragraph 1, "IP Service Delivery Platform supports an Open Systems approach to a service enhancement, allowing independent third parties with no system downtime"; page 2, paragraph 1: open platform);

creating a system virtual router (Kapustka, Page 3, Paragraphs 2 and 3, "Virtual Routers within the CoSine IPSX 9000 establish a VNC through Service Provider's IP and/or ATM core network");

configuring the processor elements from the system virtual router (Kapustka: Page 3 paragraphs 2 and 3: The processors are functioning because they are configured. Functions of the router are performed by the processors).

With regards to claim 2, an article comprising a computer readable medium having instructions thereon, wherein the instructions, when executed in a computer, create a system for executing the method of claim 1 (Kapustka: page 4, para 1; the hardware in which the switch runs; Processor Blade includes multiple CPUs and built-in memory).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4-9 are rejected under 35 U.S.C. 103(a) as being anticipated by Kapustka, K. et al., "CoSine Communications Moves VPNs 'Into the Cloud' with the Leading Managed IP Service Delivery Platform." (Applicants IDS) (Kapustka) in view of U.S. Patent 5,745,778 by Alfieri.**

Regarding claim 4,

The Kapustka reference teaches with regards to the method of claim 1, a method for managing a switch with multiple processors.

The Kapustka reference does not explicitly detail creating processes on the processor elements.

The Alfieri reference teaches configuring the processor elements includes creating processes and threads from multiple processor elements on multiple blades (Alfieri: col. 1, lines 57-67).

The Alfieri reference further teaches the system increases processor affinity improve efficiency of operations and reduce overhead between groups (Alfieri: col. 1, lines 42-48).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing a switch as taught by Kapustka while creating processes and threads as taught by Alfieri in order to improve efficiency of operations and reduce overhead between groups (Alfieri: col. 1, lines 42-48).

Claims 5-9 are rejected under the same rationale given above. In the rejections set fourth, the examiner will address the additional limitations and point to the relevant teachings of Kapustka and Alfieri.

Regarding claim 5, the method of claim 1, wherein configuring the processor elements includes:  
adding a new processor elements (Alfieri: col. 6, lines 31-41); and

using a distributed management layer to group processor elements into at least one virtual router (Alfieri: col. 4, lines 36-46; three processing layers).

Regarding claim 6, the method of claim 5, wherein using a distributed management layer to group processor elements into at least one virtual router includes:

requesting a global manager to group the processor elements (Alfieri: col. 3, lines 29-54; global scheduler);  
activating processor elements of the group (Alfieri: col. 7, lines 11-30; Figures 5a-e); and  
generating a status message that the virtual router is created (Alfieri: col. 5, lines 2-3; busy).

Regarding claim 7, the method of claim 6, wherein activating processor elements of the group includes changing a state machine for a processor element to an activate state (Alfieri: col. 5, lines 2-3; col. 7, lines 13-15).

Regarding claim 8, the method of claim 5, wherein using distributed management layer to group processor elements includes adding object identifiers to a global object database (Alfieri: col. 4, lines 23-35).

Regarding claim 9, the method of claim 4, wherein creating a virtual router includes sending a request to create a customer virtual router (Alfieri: col. 3, lines 39-44; new thread group).

**Claims 18-20 are rejected under 35 U.S.C. 103(a) as being anticipated by Kapustka, K. et al., "CoSine Communications Moves VPNs 'Into the Cloud' with the Leading Managed IP Service Delivery Platform." (Applicants IDS) (Kapustka) in view of U.S. Patent 5,745,778 by Alfieri in further view of U.S. Patent No. 6,338,092 by Chao et al.**

Regarding claim 18,

The Kapustka and Alfieri references teach with respect to the method of claim 4, a method for tracking management and configuration data with an object manager global database (Alfieri: col. 4, lines 23-35; thread group table from thread groups).

The Kapustka and Alfieri references do not explicitly disclose from data from distributed local databases.

The Chao reference teaches a global database composed of data from distributed local databases (Chao: col. 3, lines 21-27).

The Chao reference further teaches the system overcomes prior art deficiencies by decreasing administrative and end-user burden (Chao: col. 2, lines 36-37) and reducing network traffic (Chao: col. 2, lines 54-56).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing a switch with processes and threads as taught by Kapustka and Alfieri while employing a global database composed of data from distributed databases in order to decrease administrative and end-user burden (Chao: col. 2, lines 36-37) and reducing network traffic (Chao: col. 2, lines 54-56).

Claims 19-20 are rejected under the same rationale given above. In the rejections set forth, the examiner will address the additional limitations and point to the relevant teachings of Kapustka and Alfieri and Chao et al.

Regarding claim 19, the method of claim 4, wherein storing a replica of the object manager global database on a standby control blade includes maintaining consistency between the global database and the standby global database (Chao: col. 3, lines 21-27; col. 5, lines 35-47).

Regarding claim 20, the method of claim 4, wherein maintaining consistency between the global and standby databases includes updating a standby database when there is a change in the configuration of objects involved in message passing communications (Chao: col. 5, lines 35-47).

## **REMARKS**

### **The Applicant Argues:**



With respect to claims 1 and 2, applicant is unable to find the cited portions.

**In response**, the examiner respectfully submits:

The examiner asserts that the teachings of claims are in Kapustka. The examiner has further explained the cited portions in the above claims.

With respect to claim 1, "installing an operating system on each processor element, the examiner can find no language that supports this claim in the specification. Based on the generic breadth of the claim limitation, the prior art reference teaches the limitation. The applicant is encouraged to further define and detail this claim limitation with support from the specification.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number is (703) 305-0324. The examiner can normally be reached on 8:00-5:30PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (703) 308-6662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin R Bruckart  
Examiner  
Art Unit 2155  
brb  
March 28, 2004

brb

  
**HOSAIN ALAM**  
**SUPERVISORY PATENT EXAMINER**